

## **The Effect of Product Innovation and Service Innovation towards Marketing Performance (Case Study on Plastic Producer in Surabaya)**

Angelica Nataya<sup>1</sup>, J. E. Sutanto\*<sup>2</sup>  
*Universitas Ciputra, Surabaya- Indonesia*  
*Corresponding Author: Angelica Nataya*

---

**ABSTRACT:***Purpose – The purpose of this paper is the effect of product innovation and service innovation toward marketing performance, case study on plastic producer. Design/ methodology/approach – This paper uses a quantitative approach with Partial Least Square (PLS) analysis using the SmartPLS 3.0 program, while the number of samples is 76 respondents as representing each plastic producer. Findings - The results showed that product innovation had a significant effect on service innovation, service innovation had a significant effect on marketing performance, and product innovation had an effect on marketing performance. Practical implications – In general, service innovation and product innovation also play a role as a variable complementary partial mediation on product innovation relationships and marketing performance. Product innovation and service innovation carried out individually in marketing performance. Originality/ value – Companies that combine product innovation and service innovation together will gain greater revenue growth and profitability.*

**KEYWORDS** -*Product innovation, Service innovation, Marketing performance, Plastic producer*

---

Date of Submission: 17-08-2018

Date of acceptance: 31-08-2018

---

### **I. INTRODUCTION**

In the era of globalization where the emergence of competition and change are so fast, both in terms of technological changes, customer needs, and the shorter product cycle, it is unavoidable. Competition in all business sectors is getting sharper, tighter, and increasingly complex with many companies continuing to compete for profit (Pangaribuan, 2015; Kusumawati, 2010). The high level of competition is not only felt by large companies but also experienced by small and medium enterprises in Indonesia (Haji, et al., 2017). One of them is the plastic industry in Indonesia, which feels that competition is due to the increasing number of business units in the plastic industry. This growth was supported by the statement of Chairman of Inaplas is Budi Santoso, that in 2015 the growth of the plastic industry was in the range of 4.5%. In 2016 according to Secretary General Inaplas, Fajar Budiyo, the average growth of the plastic industry in 2016 was around 4.7% (Bisnis Indonesia, 2016).

To be able to compete with other companies, a company is required to always understand what is happening in the market, what consumers want, and what changes occur in the business environment. Business performance is the key to staying in the global era (Hartini, 2012) and innovation is one of the factors that determine a company's performance. Rapid technological advances and high levels of competition require companies to innovate continuously (Hartini, 2012) which will affect the company's performance (Kusumawati, 2010).

Tuan, et al. (2016), innovative performance is the combination of overall organizational achievements as a result of renewal and improvement efforts done considering various aspects of firm innovativeness, for innovation is one very important step to always be development which will affect marketing performance. Product innovation will be able to increase sales, profits and also the competitiveness of a business organization (Kusumawati, 2010). In addition to product innovation, service innovation can also provide more value to the company and also competition based on service is the best action in the face of competition or competition (Grawe, et al., 2009).

The increasingly competitive and dynamic conditions of competition will continue to demand aggressive and innovative attitudes from the company (Kusumawati, 2010). Therefore, the company's success in maintaining the continuity of its product sales lies in its ability to innovate to go one step ahead of its competitors (Haji, et al., 2017). The ability to innovate that is in accordance with the customer's continuous desire will affect the growth of customers (Haji, et al., 2017) so that innovation must be truly well planned.

## II. LITERATURE REVIEW

**Marketing Performance:** Marketing performance is a company effort to know and meet the needs and tastes of consumers (Rodríguez & Morant, 2016; Mananta & Ndubis, 2009; Smirnova, et al., 2011a; Semirnova, et al., 2011b; Huhtala, et al., 2014; Beitelspacher, et al., 2012; Cheng & Krumwiede, 2012). Purwasari & Suprpto (2012) stated that marketing performance measurement is a supervisory function of marketing management to create, build, and maintain relationships with buyers intended to achieve organizational goals. According to Wachjuni (2014) companies must have the right strategy, or must be able to take advantage from the environment to benefit from using the chosen strategy. Companies must design a broad competitive marketing strategy where companies can gain competitive advantage through superior customer value (Kotler, 2008)

**Product Innovation:** According to Atalay, et al. (2013) stated that product innovation is the introduction and development of new types of goods or services that are different from before and complement the shortcomings of the previous findings with more emphasis on quality. Companies in making product innovations must pay attention to market orientation because knowledge of market orientation is the key to successful product innovation that will be produced (Wiwoho, 2012). According to (Pardi et al., 2014; Tung, 2012; Killa, 2014; Utaminingsih, 2016) states that innovation has a significant positive effect on marketing performance. Windahl (2015) itself divides product innovation into 4 types, including modular innovation, architectural innovation, incremental innovation and radical innovation, this terminology applies to the customers and suppliers. While radical innovations show a fundamental change in new services and provide real service benefits (Cheng & Krumwiede, 2012). Product innovation alone cannot produce competitive advantage and sufficient or sustainable company growth (Shelton, 2009: 38).

**Service Innovation:** Service innovation is the development of new services that are perceived as helpful and new services to customers. In addition, service innovation can also be understood as an introduction to new services from existing services where new or developed services can also be found in companies (Durst, et al., 2015; Grawe, et al., 2009). According to research Lin (2013) it is known that the positive influence of service innovation on marketing performance can be seen from the increase in the profitability of the company. Previous studies have generally suggested that innovative services enable firms to access market trends (Carbonell, et al., 2009) and enhance their learning capabilities (Hertog et al., 2010), thus facilitating marketing performance (Menor & Roth, 2008). For this research indicates that firms service innovation implementation may positive effect their performance (Menor & Roth, 2008; Carbonell, et al., 2009; Melton & Hartline, 2010). Service-based firms emphasize the use of new services and combinations of various resources, knowledge, and skills that represent a service innovation through which new service provision may create value and increase performance. Because service-based firms are more engaged in the provision of innovative services, firms in competitive markets have more opportunities to create value for customers (Berry, et al., 2006; Maglio & Spohrer, 2008) and consequently to increase marketing performance (Melton & Hartline, 2010).

### Analysis Model

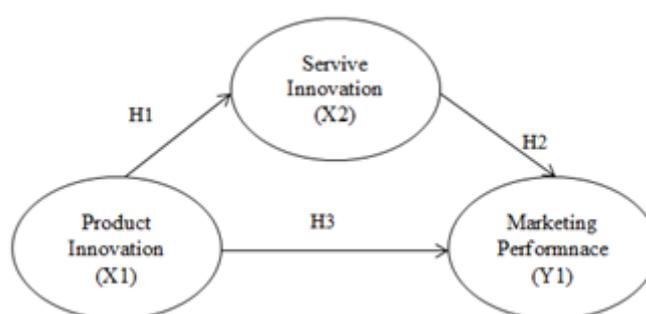


Figure 1. Analysis Model

## III. RESEARCH METHODS

The research approach used in this study is a quantitative approach that aims to determine the relationship between product innovation, service innovation, and marketing performance (Bungin, 2015: 13). The research method used is Partial Least Square (PLS) analysis approach to describe the relationship between variables with marketing performance as an intervening variable (Ghozali & Latan, 2015: 243). Partial Least Square (PLS) analysis is used with the SmartPLS 3.0 program (Jogiyanto & Abdillah, 2009: 11). The population in this study are all companies engaged in the plastic industry in the city of Surabaya, which has a medium scale of 76 companies. The sampling method used is saturated sampling method (census) where all members of the

population are used as samples (Sugiyono, 2015: 124) so as to produce a sample of 76 companies. Researchers used questionnaires as data collection techniques (Sugiyono, 2015: 199). The scale used is a Likert scale because it can measure attitudes, opinions, and perceptions of a person or group of people (Sugiyono, 2015: 134). This research will also examine the mediation effect to determine the type of mediation of the latent variable of service innovation. Determination of the type of mediation uses the following mediation type chart (Zhao, et al., 2010).

**IV. RESULT AND DISCUSSION.**

Before testing with the PLS method, the researchers tested the validity and reliability of the questionnaire in this study. Testing the validity and reliability of questionnaires was done using SPSS 22 version 22.0 statistical program (Priyatno, 2014). Validity test in this study was conducted to determine the ability of research instruments to measure what must be measured (Jogiyanto&Abdillah, 2009: 58). In Table 2 shows that all instrument statements of product innovation, service innovations, and marketing performance have a significance value of 0.000 and proved to be smaller than 0.1 so that it is declared valid and has measurement capabilities for the three variables that exist in this study.

**Validity Test:** A questionnaire is said to be valid if all statements on a research instrument are able to reveal something that will be measured by research instruments or questionnaires. The criteria of the instrument are declared valid if the correlation value (pearson correlation) is positive, and the significance value is < 0.05. The test was carried out using the SPSS version 22.0 statistical program (Priyatno, 2014). Based on the analysis carried out, the results of validity testing can be shown in Table 1

**Table 1.** Validity Test Results

Variable	Indicator	Pearson Product Moment	Sig.	Remarks
Product Innovation (X1)	Line extensions product (X1.1)	0.707	0.000	Valid
	Me-too product (X1.2)	0.876	0.000	Valid
	New-to-the-world product (X1.3)	0.799	0.000	Valid
Service Innovation (X2)	Service delivery (X2.1)	0.807	0.000	Valid
	Services according to customer requirements (X2.2)	0.841	0.000	Valid
	Development or creation of new services (X2.3)	0.728	0.000	Valid
Marketing Performance (Y1)	Growth in market share (Y1.1)	0.798	0.000	Valid
	Sales growth (Y1.2)	0.714	0.000	Valid
	Forgiveness (Y1.3)	0.679	0.000	Valid
	Growth in the number of customers (Y1.4)	0.740	0.000	Valid

Source: Data Processing 2018

**Reliability Test:** To test the reliability of the instruments, each variable (X1), (X2) and (Y1) can be analyzed using SPSS version 22.0, the results are as follows:

**Table 2.** Reliability Test Results

Variable	Indicator	Cronbach's Alpha If Item Deleted	Cronbach's Alpha	Remarks
Product Innovation (X1)	Line extensions product (X1.1)	0.818	0.822	Reliable
	Me-too product (X1.2)	0.756		
	New-to-the-world product (X1.3)	0.778		
Service Innovation (X2)	Service delivery (X2.1)	0.779	0.823	Reliable
	Services according to customer requirements (X2.2)	0.764		
	Development or creation of new services (X2.3)	0.813		
Marketing Performance (Y1)	Growth in market share (Y1.1)	0.731	0.784	Reliable
	Sales growth (Y1.2)	0.762		
	Forgiveness (Y1.3)	0.766		
	Growth in the number of customers (Y1.4)	0.736		

Source: Data Processing 2018

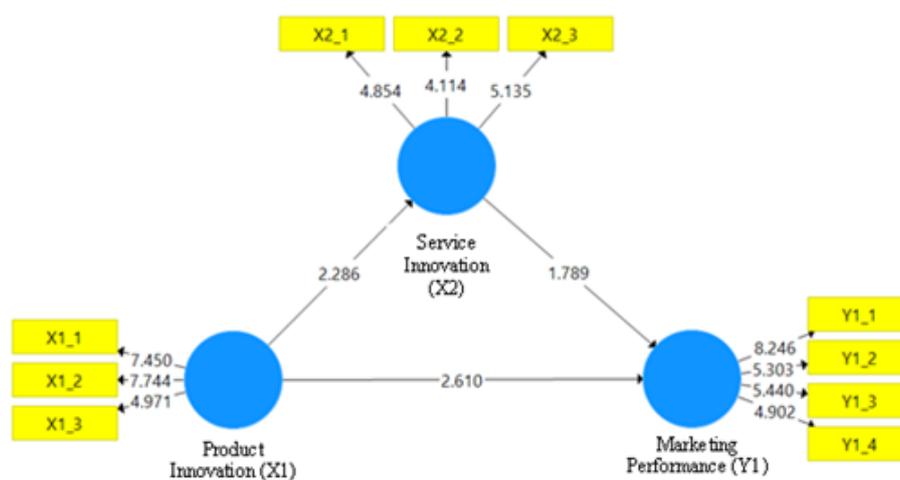
Reliability testing was carried out on this research to show the accuracy and accuracy of the measuring instruments used in this research in the form of a Likert scale. In Table 2 shows that the three variables have Cronbach's Alpha value greater than 0.7 (Jogiyanto&Abdillah, 2009: 62; Ghozali&Latan, 2015: 77) and the

Cronbach's Alpha value for each indicator is greater than the Cronbach's Alpha If Deleted Item value so that all indicators which is used reliably and is right to be used as a measuring tool in this study.

**Table 3.** Path Coefficients Analysis Result

	Original Sample	Sample Mean	Standard Deviation	T-Statistics	Remarks
Product Innovation → Marketing Performance	0.349	0.370	0.134	2.610	positive and significant
Service Innovation → Marketing Innovation	0.251	0.252	0.140	1.789	positive and significant
Product Innovation → Service Innovation	0.265	0.322	0.116	2.286	positive and significant

Source: Data Processing 2018



**Figure 2.** Path Analysis Diagram

Based on Table 3 about the results of the analysis of path coefficients and Figure 2 concerning path analysis diagrams it can be seen the relationship between the three latent variables in this study.

- [1] First, it is known that the effect of product innovation on service innovation has an Original Sample value of 0.265 and a t-statistic value of 2.286 where the t-statistic value is greater than 1.65. This shows that product innovation has a positive and significant effect on service innovation so that the first hypothesis can be accepted. In previous studies have not been explained in detail whether product innovation has a significant effect on service innovation, but in previous studies can be known how product innovation integrates and has an impact on service innovation. Product innovation will affect service innovation in relation to customers, can meet customer desires (Bettencourt & Brown, 2013) and create new services or the development of new services. Improved service innovation that is in line with product innovations that have been carried out will keep products continuously used and customers become more satisfied with the purchase of these products (Shelton, 2009). These service innovations will emerge during the use of products resulting from innovations that can cause new needs from customers that have not been known before (Gebauer, et al., 2008).
- [2] Second, it is known that the effect of service innovation on marketing performance has an original sample value of 0.251 and a t-statistic value of 1.789 where the t-statistic value is greater than 1.65. This shows that service innovation has a positive and significant effect on marketing performance so that the second hypothesis can be accepted. This is in line with research conducted by Daud (2016) which states that the relationship between service innovation and marketing performance has a significant influence and has a positive contribution to marketing performance. Service innovations carried out by companies in the plastic industry that produce new services, new procedures, new processes, or the development of previous services will increase added value for the services provided to customers (Muslichati, 2015).
- [3] Third, it is known that the effect of product innovation on marketing performance has an original sample value of 0.349 and a t-statistical value of 2.610 where the t-statistic value is greater than 1.65. This shows that product innovation has a positive and significant effect on marketing performance so that the third hypothesis can be accepted. This is in line with the research conducted by (Lapian, 2016; Haji, et al., 2017) which states that product innovation has a positive and significant effect on marketing performance. From

the old products that have reached the saturation point on the market, an innovation is needed to replace the old product either entirely new or develop old products to become more modern so that it can increase consumer desire to purchase products and new product marketing continues to increase (Haji, et al., 2017).

In addition to testing the three latent variables, it is known that the results of path multiplication of product innovation coefficients on service innovation, service innovation on marketing performance, and product innovation on marketing performance resulted in a positive value of 0.0232 so that the known mediating effect of service innovation is complementary partial mediation. When traditional companies centered only on products began to switch to integrating product innovation and service innovation, then competitiveness, profits, and company growth will increase (Shelton, 2009). More and more industry leaders are completing their product offerings with service innovation to be able to meet customer needs so as to expand market share (Shelton, 2009). This shows that service innovation has the nature to complement product innovation in part which will affect marketing performance.

## V. CONCLUSION

Based on the results of the calculation analysis can be summarized as follows:

- [1] There is a positive and significant influence on product innovation variables on service innovation
- [2] Variable service innovation has a significant and positive effect on marketing performance. Service innovation should be seen as the main competitive strategy because if the product offered is good, but the service provided to the customer is not good and not as needed, then the customer can move to a competitor with better service and will not re-purchase
- [3] Product innovation variables have a positive and significant effect on marketing performance.

**Suggestion:** Manufacturing companies are expected to combine product innovation and service innovation and maintain a balance between the two innovations. Because product innovation and service innovation carried out individually can only increase sales revenue, but if a company that combines product innovation and service innovation together will increase revenue growth and greater profitability.

**Future Research:** Subsequent research can be conducted with a focus on companies with different scales as well as companies in industries other than plastic. In addition, it can also re-do research on indicators of product innovation variables and service innovations that are more specific than companies in their respective fields, further research on other factors that affect marketing performance that has not been tested include market orientation, price, promotion, and strategies for dealing with competitors.

## ACKNOWLEDGEMENTS

We would like to thank the Dean of Program Study of Magister Management, Universitas Ciputra–Surabaya so that we write this paper. Besides that we also thank the Manager of the Journal of IJBMI, so that this paper can be published.

## REFERENCES

- [1]. Pangaribuan, N.P. (2015). Pelaksanaan strategi diferensiasi produk pada hotel mona plaza Pakanbaru. *Jurnal FISIP*. 2 (2). 1 -9
- [2]. Kusumawati, R. (2010). Pengaruh karakteristik pimpinan dan inovasi produk barter terhadap kinerja perusahaan untuk mencapai keunggulan bersaing berkelanjutan. *AKSES*. 5 (9). 53-64.
- [3]. Haji, S., Arifin, R., & ABS, M. K. (2017). Pengaruh orientasi kewirausahaan, inovasi produk, keunggulan bersaing terhadap kinerja pemasaran usaha cengkeh di Bawean. *Jurnal Ilmiah Riset Manajemen*. 6(2). 83 - 95
- [4]. Bisnis Indonesia. "Bisnis plastik diprediksi membaik mulai semester II/2016". Available at: <http://industri.bisnis.com/read/20160712/257/565213/bisnis-plastik-diprediksi-membaik-mulai-semester-ii2016>. (Accessed: 15 July 2018)
- [5]. Hartini, S. (2012). Peran inovasi: Pengembangan kualitas produk dan kinerja bisnis. *Jurnal Manajemen dan Kewirausahaan*. 14(1). 83-90.
- [6]. Tuan, N., Nhan, N., Giang, P., & Ngo, N. (2016). The effects of innovation on firm performance of supporting industries in Hanoi – Vietnam. *Journal of Industrial Engineering and Management*. 9 (2). 413-431
- [7]. Grawe, S. J., Chen, H., & Daugherty, P. J. (2009). The relationship between strategic orientation, service innovation, and performance. *International Journal of Physical Distribution & Logistics Management*. 39(4). 282-300
- [8]. Rodríguez, A. L. L. & Morant, G.A. (2016). Linking market orientation, innovation and performance: An empirical study on small industrial enterprises in Spain. *Journal of Small Business Strategy*. 26 (1). 37-50
- [9]. Matanda, M. J., & Ndubisi, N. O. (2009). Market orientation, supplier perceived value and business performance of SMEs. *Journal of Enterprise Information Management*. 22 (4). 384 - 407.
- [10]. Smirnova, M., Henneberg, S. C., Ashnai, B., Naudé, P., & Mouzas, S. (2011a). Understanding the role of marketing–purchasing collaboration in industrial markets: The case of Russia. *Industrial Marketing Management*. 40 (1). 54-64.
- [11]. Smirnova, M., Naudé, P., Henneberg, S. C., Mouzas, S & Kouchtch, S. P. (2011b). The impact of market orientation on the development of relational capabilities and performance outcomes: The case of Russian industrial firms. *Industrial Marketing Management*. 40 (1). 44-53.
- [12]. Huhtala, J.-P., Sihvonen, A., Frosen, J., Jaakkola, M., & Tikkanen, H. (2014). Market orientation, innovation capability and business performance: Insights from the global financial crisis. *Baltic Journal of Management*. 9 (2). 134 - 152.

- [13]. Beitelspacher, L. S., Tokman, M., Adams, F. G., & Richey J. R. G. (2012.) Retail service-based operant resources and market performance. *The International Journal of Logistics Management*, 23 (3). 408 - 434
- [14]. Cheng, C. C., &Krumwiede. D. (2012). The role of service innovation in the market orientation new service performance linkage. *Technovation*. 32 (7-8). 487-497
- [15]. Purwasari, M. M. N., &Suprpto, B. 2014. PengaruhOrientasiPasarterhadap Kinerja Cafe di Yogyakarta. *Jurnal Manajemen*. 8 (1). 1 - 15
- [16]. Wachjuni. (2014). Pengaruhorientasipasar .inovasiprodukdan kualitas layananterhadap kinerja pemasarandalamupaya mencapainya keunggulanbersaing. *JurnalEkonomidanTeknikInformatika*. 2 (1). 1- 23
- [17]. Kotler, P. (2008). *Manajemen pemasaran*, Edisimileniumditerjemahkan Benyamin Molan, PT. Prenhallindo, Jakarta
- [18]. Atalay, M., Anafarta, N., &Sarvan, F. (2013). The relationship between innovation and firm performance: An empirical evidence from Turkish automotive supplier industry. *Procedia-Social and Behavioral Sciences* 75 (2). 226-235
- [19]. Wiwoho, G. (2012). Analisispengaruhorientasipasar, orientasipembelajaranterhadapinovasiprodukdan kinerja pemasaran (Studi padasentraindustri kecil rumah tanggakerajinananyamanpandan di Desa Grenggengkecamatan KaranganyarkabupatenKebumen). *Jurnal Manajemen* 12 (2). 34-50
- [20]. Pardi, Suharyono, Imam, S., Zainul, A. (2014). The Effect of market orientation and entrepreneurial orientation toward learning orientation, innovation, competitive advantages and marketing performance. *European Journal of Business and Management*. 6 (21). 69-80
- [21]. Tung, J. (2012). A study of product innovation on firm performance. *The international Journal of Organizational Innovation*, 4 (3). 83-97
- [22]. Killa, M. F. (2014). Effect of entrepreneurial innovativeness orientation, product innovation, and value co-creation on marketing performance. *Journal of Research in Marketing*. 2 (3). 198-204
- [23]. Utaminingsih, A. (2016). Pengaruhorientasipasar, inovasi, dankreativitasstrategipemasaranterhadap kinerja pemasaran pada UKM kerajinanrotan di DesaTelukWetan, Welahan, Jepara. *Media Ekonomidan Manajemen*. 31 (2). 77- 87.
- [24]. Windahl, C.(2015). Understanding solutions as technology-driven business innovations. *Journal of Business & Industrial Marketing*. 30 (3/4). 378 - 393
- [25]. Shelton, R. (2009). Integrating product and service innovation. *Research-Technology Management*. 52 (3). 38-44.
- [26]. Durst, S., Mention, A. L., &Poutanen, P. (2015). Service innovation and its impact: What do we know about?. *InvestigacionesEuropeas de Dirección y Economía de la Empresa*. 21 (2). 65-72
- [27]. Lin, L. (2013). The impact of service innovation on firm performance. *The Service Industries Journal*. 33 (15-16). 1599-1632.
- [28]. Carbonell, P., A.I. Rodríguez, E., &Pujari, D. (2009). Customer involvement in new service development: An examination of antecedents and outcomes. *Journal of Product Innovation Management*. 26 (5). 536-550.
- [29]. Hertog, P.D, Van Der Aa, W., & De Jonh, M. W. (2010). Capabilities for Managing Service Innovation: Towards a Conceptual Framework. *Journal of Service Management*. 21 (4). 490-514
- [30]. Menor, L., & Roth, A.V. (2008). New service development competence and performance: An empirical investigation in retail banking. *Production. Operations Management*. 17 (3). 267 - 284
- [31]. Melton, H. L. & Hartline, M. D. 2010. Customer and frontline employee influence on new service development performance. *Journal of Service Research*. 13 (4). 411-425
- [32]. Berry, L. L., Shankar, V., Parish, J. T., Cadwallader, S. &Dotzel, T. (2006) Creating new markets through service innovation. *MIT Sloan Manage Review*. 47 (2). 56-63.
- [33]. Bungin, B. (2013). *Metodologi Penelitian Sosial dan ekonomi: Format-format kuantitatif dan kualitatif untuk studi sosiologi, kebijakan publik, komunikasi, manajemen, dan pemasaran*. Jakarta: Prenadamedia Group.
- [34]. Ghazali, H. I., &Latan, H. (2015). Partial least squares: Konsep, teknik, dan aplikasinya menggunakan program smartPLS 3.0 (Untuk penelitian empiris). Semarang: Badan Penerbit-Undip
- [35]. Jogiyanto & Abdillah, W. (2009). *Konsep dan aplikasi PLS (Partial Least Square) untuk penelitian empiris*. Yogyakarta: BPFE-Yogyakarta.
- [36]. Sugiyono. (2015). *Metode penelitian pendidikan. Pendekatan kuantitatif, kualitatif dan R&D*. Bandung. CV. Alfabeta
- [37]. Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering baron and kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*. 37 (2). 197-206.
- [38]. Priyatno, D. (2014). *SPSS 22: Pengolahan data terpraktis*. Yogyakarta: CV. Andi.
- [39]. Bettencourt, L. A., & Brown, S. W. (2013). From goods to great: Service innovation in A product-dominant firm. *Business Horizons*. 56(3). 277-283.
- [40]. Gebauer, H., Krempf, R., Fleisch, E., & Friedli, T. (2008). Innovation of product-related services. *Managing Service Quality: An International*. 18 (4). 378 - 404
- [41]. Daud, A. (2016). Pengaruh inovasi layanan dan keunggulan posisional pada kinerja pemasaran. *Jurnal Siasat Bisnis*. 20 (1). 66-78.
- [42]. Muslichati, E. Z., & Wartini, S. (2015). Pengaruh kualitas layanan dan inovasi layanan terhadap kepuasan konsumen pada rumah sakit buah hati Kudus. *Management Analysis Journal*. 4 (4). 341-347.
- [43]. Lopian, A. A., Massie, J., & Ogi, I. (2016). Pengaruh orientasi pasar dan inovasi produk terhadap kinerja pemasaran pada PT. BPR prismadana amurang. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*. 4 (1). 1330-1339.

Angelica Nataya "The Effect Of Product Innovation And Service Innovation Towards Marketing Performance " *International Journal of Business and Management Invention (IJBMI)* , vol. 07, no. 08, 2018, pp. 61-66